

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

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| Applicant's or agent's file reference FP19505 | FOR FURTHER ACTION | | See item 4 below |
| International application No. PCT/AU2004/000463 | International filing date (<i>day/month/year</i>) 08 April 2004 (08.04.2004) | Priority date (<i>day/month/year</i>) 08 April 2003 (08.04.2003) | |
| International Patent Classification (IPC) or national classification and IPC ⁷ B23K 31/02, 9/04, F16B 7/00 | | | |
| Applicant ONESTEEL TRADING PTY LIMITED | | | |

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

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| <input checked="" type="checkbox"/> Box No. I | Basis of the report |
| <input type="checkbox"/> Box No. II | Priority |
| <input type="checkbox"/> Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> Box No. VI | Certain documents cited |
| <input type="checkbox"/> Box No. VII | Certain defects in the international application |
| <input checked="" type="checkbox"/> Box No. VIII | Certain observations on the international application |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

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| Date of issuance of this report 14 October 2005 (14.10.2005) |
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PATENT COOPERATION TREATY

From the:
INTERNATIONAL SEARCHING AUTHORITY

REC'D 15 JUN 2004

PCT

WIPO

PCT

To:

Griffith Hack
GPO Box 4164
SYDNEY NSW 2001

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

(PCT Rule 43bis.1)

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|-------------------------------------|-------------|
| Date of mailing (day/month/year) | 10 JUN 2004 |
|-------------------------------------|-------------|

FOR FURTHER ACTION

See paragraph 2 below

Applicant's or agent's file reference

RPW:KKA:FP19505

International application No.
PCT/AU2004/000463

International filing date (day/month/year)
8 April 2004

Priority date (day/month/year)
8 April 2003

International Patent Classification (IPC) or both national classification and IPC

Int. Cl. ⁷ B23K 31/02, 9/04, F16B 7/00

Applicant

ONESTEEL TRADING PTY LIMITED et al

1. This opinion contains indications relating to the following items:

| | | |
|-------------------------------------|--------------|--|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the opinion |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input checked="" type="checkbox"/> | Box No. VIII | Certain observations on the international application |

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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E-mail address: pct@ipaaustralia.gov.au
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I.A.BARRETT

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WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/AU2004/000463

Box No. I Basis of the opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
 a sequence listing
 table(s) related to the sequence listing
 - b. format of material
 in written format
 in computer readable form
 - c. time of filing/furnishing
 contained in the international application as filed.
 filed together with the international application in computer readable form.
 furnished subsequently to this Authority for the purposes of search.
3. In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/AU2004/000463

Box No. V **Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

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|-------------------------------|-------------|-----|
| Novelty (N) | Claims 1-27 | YES |
| | Claims | NO |
| Inventive step (IS) | Claims 1-27 | YES |
| | Claims | NO |
| Industrial applicability (IA) | Claims 1-27 | YES |
| | Claims | NO |

2. Citations and explanations:

The prior art does not disclose any method of welding polygonal hollow sections (PHS) where welds across a surface of the PHS, and extending continuously from a connection weld to a location remote from the connection weld, result in an improved welded connection for PHS as claimed in independent claims 1, 20 and 22. The invention claimed is considered novel and inventive over the prior art.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/AU2004/000463

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

1. Independent claims 20 and 22 are not fully supported by the description. From reading the description (page 6 line 10-15 in particular), it is clear that the invention lies in "forming a continuous weld extending across a surface, away from the usual connection weld at the end of the PHS". This feature is entirely absent from independent claims 20 and 22. Claims 20 and 22 claim by result and include any or all possible welding methods capable of achieving that result, including welding methods that may not have been envisioned by the description.
2. Claim 1 is unclear with regard to a "weld extending continuously from a connection weld...to a location remote from the connection weld". This implies that a weld bead extends continuously from the connection weld away from the connection weld, and may include a weld perpendicular to the connection weld. This is clearly different from the invention described where several weld beads extend across the surface of the PHS parallel to the connection weld.